Speaking as an experienced professional in the IT field, I needed to make comment on the current status.

Net Neutrality rules are **necessary** for our economy, and the current rules are **too lenient**.

Consumer protections are important in a time where Internet access and services are necessary to be a fully functioning member of society.

Today we face an industry intent on practices that stifle necessary access in their pursuit of profit, allowed to do so only by the **abysmal** lack of choices.

The problem at the core of it is the *"hidden costs"* of non-neutrality. When companies provide your Internet access and favor their own partner services, then they are (in effect) raising the prices of their competitors.

A case in point would be the blatant violation of these practices currently being committed by AT&T.

The way it is presented is: When you subscribe to their DirectTV streaming service (also owned by them) and use it over cellular internet, you don't get charged *"data"*.

The reality of the effect: If you want to watch 4GB worth of streaming video in a month on any other service, you have to pay $20 more a month (the difference between their 3GB service at $60 and their 6GB service at $80).

If you believe in encouraging competition between companies, this will have the opposite effect. It encourages monopolistic practices which stifle innovation. It allows a company to leverage it's market share in one category to penalize it's competition (harmful to consumers) instead of competing with a superior product (beneficial to consumers).

This is even more significant when it comes to residential access.

The majority of the U.S. has a choice between only two carriers for reasonable access[i], if any choice at all. Some of these companies have already started establishing data limits[ii].

It's important to recognize this need as competition among basic access providers is not sustainable:
- Wired service (Cable and Fiberoptic) is cost prohibitive to extend and deployment is extremely disruptive to urban environments. Distance covered dramatically amplifies this cost to make it prohibitive to provide service to remote users.
- DSL service is severely limited by the underlying technology (basic phone lines). It will quickly lose it's ability to keep up with other services in speed provided. Additionally it requires infrastructure to be placed near customers, dramatically reducing or eliminating the profit provided by servicing remote customers.
- Wireless service (including satellite, cellular and dedicated services) is limited by available radio bandwidth. Between costs of purchasing available spectrum, the limited supply available, and the fact that all spectrum has varying properties it is not possible for competition to be sustained in wireless and we will need more and more spectrum to fill the needs of existing companies and services.

We need these neutrality regulations to ensure that members of this deeply constrained market do not abuse their positions.

And as I said before about it being **too lenient**, it is ideal to push fully toward declaring wired services to be utilities.

If this sounds absurd, a bit of reference is helpful: The rest of the developed world pays significantly less for significantly higher performing service… and we're the ones who created the technology.

I know it is unlikely that this comment will be read, but if it is, I appreciate your time in doing so.

i   Reasonable access would be services that provide:
- High Speeds: offering at least 25mbps down / 3 mbps up, the current FCC definition for broadband (as a professional, this is a reasonable definition and the speeds should absolutely be re-evaluated and raised over time)
- Accessible Prices: offering the above speeds at $50 or less a month
- No Data Limits or Large Data Limits: 100s of Gigabytes a month at minimum

ii   Data limits have no real technical justification. They allow companies to advertise higher speeds while forcing users to self-limit their usage.

Reasonable network management practices are:
- Bandwidth limits: bits per second as you see in residential access with basic QoS (quality of service) controls when over-saturated (minimal version would be to divvy bandwidth available equally among users currently active)
- Advanced QoS: Identify and limit high bandwidth applications that cause network congestion. (Example: T-Mobile's One service. Video and Audio streams being problematically high bandwidth are limited, allowing them to easily service customers needs)